

**UNITED STATES DEPARTMENT OF COMMERCE****United States Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

MF

MF

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/479,267 01/06/00 UENO

M 073600.P022

WM01/0409

JAMES Y GO  
BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP  
12400 WILSHIRE BOULEVARD  
7TH FLOOR  
LOS ANGELES CA 90025

EXAMINER

ALTMAN, F

ART UNIT

PAPER NUMBER

2652

DATE MAILED:

04/09/01

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

SM

# Office Action Summary

Application No.

09/479,267

Applicant(s)

UENO ET AL.

Examiner

Franklin D. Altman

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2000 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

Art Unit: 2652

***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: Figures 3 and 5 include reference numeral 51. Correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Aoshima et al (U.S. Patent 6,046,892).

As per claim 1:

Aoshima et al disclose a spin valve magnetoresistance sensor {20}, including a base layer {21,22} on top of a substrate {inherent from “substrate”, column 1, line 36}, the base layer including a first base film {21} and a second base film {22} formed on top of the first base film {21}, the second base film {22} having an alloy (“NiFeCr” in Figure 5) represented by NiFeX wherein X includes one of Cr, Nb and Rh, the second base film having a face-centered cubic (fcc) structure and a (111) orientation {inherent from “NiFeCr<sub>24.3%</sub>(3)” in Figure 5}.

As per claim 2:

Art Unit: 2652

Aoshima et al disclose wherein a film thickness {"3 nm", column 3, line 38} of the second base film {22} is within a range of 20 to 100Å. {It is noted the 3 nm is identical to 30 Å, which is within the claimed range.}

As per claim 3:

Aoshima et al disclose the second base film (22) within the range of 20 to 50 at%. See Figure 5.

As per claim 4:

Aoshima et al disclose wherein the spin valve magnetoresistance sensor is located within a thin film magnetic head {Figure 4}.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Iwasaki et al of record (U.S. Patent 6,157,525) is materially similar in embodiment 17 of Figure 27 to Aoshima but discloses only a 5% atomic percentage of Cr in a NiFeCr second base layer. Kanai (U.S. Patent 5,850,323) discloses face-centered cubic structure and NiFeCr, NiFeNb, and NiFeRh compositions. Iwasaki et al (U.S. Patent 5,991,125), and Iwasaki et al (U.S. Patent 5,549,978) and Iwasaki et al (U.S. Patent 5,780,176) are similar to Iwasaki et al of record.

Torng et al (U.S. Patent 5,764,445), Araki et al (U.S. Patent 6,074,743), and Araki et al (U.S. Patent 5,874,886) disclose conventional use of NiFeCr base layers or fcc structures in thin film magnetic heads.

Art Unit: 2652

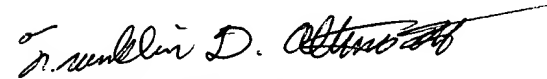
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Franklin D. Altman whose telephone number is (703) 305-7494.

The examiner can normally be reached on mon-fri, 6:30 am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen, can be reached at (703) 305-9687.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-9051 for formal communications or (703) 305-7201 for informal communications, which should be so designated.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Franklin D. Altman, III



DAVID L. OMETZ  
PRIMARY EXAMINER